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ABSTRACT

This document outlines the Competency Based Education (CBE) movement in the United States. Following introductory material, this outline covers the roots of the CBE movement; distinguishing characteristics; degree of participation by states, higher education, teachers, administrators, and community; current resources; a bibliography of significant publications; major issues; and a glossary for CBE. A profile of CBE by state and a list of widely used acronyms are included. (MJM)

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COMPETENCY-BASED EDUCATION:
THE STATE OF THE SCENE

by Allen A. Schmieder

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AACTE attempts, through publications, to provide a forum for a wide spectrum of opinion on a variety of topics. This policy permits divergent viewpoints without assuming the endorsement of the Association.

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FOREWORD

In developing the study guide entitled Competency-Based Education: The State of the Scene, Allen A. Schmieder has performed a good service to the educational community inundated with relatively new concepts and terminology. This study guide enables the reader to master the basic concepts and terminology and use them as a point of departure in studying the ever-growing literature on CBE, to listen perceptively during discussions of the subject, and to implement those aspects of CBE which are desirable and feasible in particular educational settings.

This publication is somewhat of a departure from the analytical-interpretive monographs which typify much of the productivity of the ERIC system. It hopefully will move education forward through its encouragement of intelligent study and experimentation by broad sectors of the American educational community.

As far as the American Association of Colleges for Teacher Education (AACTE) is concerned, the publication is most relevant. For several months the Association has operated as part of a large national project on performance-based teacher education funded by the U.S. Office of Education through the Texas Education Agency. Under the guidance of a distinguished national Committee on Performance-Based Teacher Education, the AACTE has generated a provocative series of monographs on performance-based teacher education, has conducted conferences on the subject, and in general has served as a stimulus to a careful and critical analysis of a whole competency-based education movement. This publication is number 9 in the AACTE-PBTE series. A listing, with order form, is in the appendix to enable interested persons to identify and secure documents which are of most interest to them.

The U.S. Office of Education, the AACTE (co-sponsor of the ERIC Clearinghouse on Teacher Education), the other two sponsors (Association of Teacher Educators and the National Education Association) do not necessarily advocate competency-based education. Therefore, publication of this document should not be inferred as an endorsement of the concept. The document is produced as an interesting and useful addition to the educational literature.

--Joel L. Burdin
Director

February 1973

PROLEGOMEN

The quest for methods and programs which will improve the quality of instruction in American schools must be an unending one. For in the pursuance of betterment there is always one more challenge to encounter, a design to further perfect, one more refinement to make. The cultivation of competency-based approaches to education is one of the most influential and important developments in this progressive effort to advance the process of schooling.

Of all the areas presently being explored to ensure an increased quality of instruction, competency-based education and performance-based certification have, perhaps, the greatest promise for effectively and finally meshing theory and reality into an integral, operational program design.

Since the first state-of-the-art paper was published on this topic, the competency-based programs and philosophy have affected a myriad of people, institutions, publications, and programs which were up to that time relatively uninvolved in competency-based education. The burgeoning interest in, employment, and evaluation of competency-based programs has necessitated a revised assessment of the present status of this movement. The result of the effort to update what has been occurring is what you hold in your hand, The State of the Scene. This publication is meant to serve as a map through which can be found people, places, and publications of importance to the growth of the competency-based movement. It is hoped that this guide will help to make further creative contribution to this exciting and viable endeavor. For this reason the competency-based philosophy is viewed as a signal process in the constant evolution of educational betterment. Its goal is the improvement of instructional quality for the children of this country.

--William L. Smith
Acting Deputy Commissioner
for Development
U.S. Office of Education

ABSTRACT

This document outlines the Competency-Based Education (CBE) movement in the United States. Following introductory material, this outline covers the roots of the CBE movement; distinguishing characteristics; degree of participation by states, higher education, teachers, administrators, and community; current resources; a bibliography of significant publications; major issues; and a glossary for CBE; and a profile of CBE by state. (MM)

ERIC DESCRIPTORS

To expand a bibliography using ERIC, descriptors or search terms are used. To use a descriptor: (1) Look up the descriptor in the SUBJECT INDEX of monthly, semi-annual, or annual issue of Research in Education (RIE). (2) Beneath the descriptors you will find title(s) of documents. Decide which title(s) you wish to pursue. (3) Note the "ED" number beside the title. (4) Look up the "ED" number in the "DOCUMENT RESUME SECTION" of the appropriate issue of RIE. With the number you will find a summary of the document and often the document's cost in microfiche and/or hardcopy. (5) Repeat the above procedure, if desired, for other issues of RIE and for other descriptors. (6) For information about how to order ERIC documents, turn to the back pages of RIE. (7) Indexes and annotations of journal articles can be found in Current Index to Journals in Education by following the same procedure. Periodical articles cannot be secured through ERIC.

TOPIC: *"Competency-Based Education: The State of the Scene."*

DESCRIPTORS TO USE IN CONTINUING SEARCH OF RIE AND CIJE:

- Educational Programs
- Evaluation
- *Performance Based Teacher Education
- *Performance Criteria
- *Performance Factors
- *Performance Specification
- *Teacher Certification

*Asterisk(s) indicate major descriptors.

INTRODUCTION

The State of the Scene is a relatively brief outline of the Competency-Based Education (CBE) "movement" in the United States. It is always a very delicate matter to attempt to simply describe anything that is "national" let alone try to do so with a subject as complex and important as CBE. But that is just the point: CBE is rapidly becoming the most significant lever for educational reform since Sputnik, and there is great need for widespread and direct communication about its nature and potential. This particular summary is intended primarily for people who are already actively engaged in CBE or who at least know enough about it to find such a generalized survey both understandable and useful.

No matter the nature or depth of coverage, any cross-section of such a diverse and dynamic movement as CBE would soon become outdated. So for those people and places included (or inadvertently not included) in this report where situations have since changed from those indicated, I ask both forgiveness and communication about how to make any future editions more accurate and more useful.

I would like to express my deepest appreciation to the many people and organizations who so generously contributed to the development of The State of the Scene. Special thanks go to Karl Massanari of the AACTE Committee on Performance-Based Teacher Education and Fred MacDonald of the National Commission on Performance-Based Education who encouraged me to "take some of the 'overview' speeches that I had been giving on CBE and put them into written form so that they could be shared with a wider audience." Because of its everyday existence and consistency, it is almost easy to overlook the great importance of the creative and stimulating environment in which I work--a tribute to the leadership of William Smith and a collection of the most exciting "bureaucrats" in the land.

--Allen A. Schmieder

February 1973

COMPETENCY-BASED EDUCATION:
THE STATE OF THE SCENE

WHAT THE PEOPLE ARE SAYING ABOUT IT

"Does not mean a teacher education program is good--it just means that it is easier to tell."

"Pin-pointing as accurately as possible who is responsible for what."

"Emerging as the major lever for educational reform within the googolplexity of the seventies."

"It belies the 'all things to all people' appearance of teaching and learning and permits the resources of a system to be directed toward appropriate and accountable ends."

"A process not a program." "An orientation."

"A multi-faceted concept in search of practitioners."

"Probably no educational movement of recent times has shown so much promise as this application of a common sense principle--performance-based education."

"Old wine in new bottles."

"It sounds like a good idea if you can figure out what it is."

"Collection of evidence verifying the candidate's ability to perform."

"CBTE appears to hold great promise and is a concept which deserves adequate testing."

"The best management tool available to today's educators."

"Whether or not competency-based teacher education will answer most of our current problems in education, it has at least forced us to take a long hard look at ourselves and our teaching practices."

WHAT'S IN A NAME?^{1,2}

Criterion-Referenced Teacher Education and Certification

Proficiency-Based Teacher Education and Certification

Consequence-Based Teacher Education and Certification

Output-Oriented Teacher Education and Certification

Performance-Based Teacher Education and Certification

Competency-Based Teacher Education and Certification

Performance-Based Education and Certification

Competency-Based Education and Certification

¹In reverse order of author's preference, i.e., most preferred at bottom, least preferred at top. Competency-Based Education and Certification is preferred for two major reasons: (1) It encompasses all roles, levels and aspects of education. (2) It encompasses all professions.

²"What's in a Name," an unpublished paper written by Robert Houston, University of Houston, which explores the relative merits of some of the current labels for the Competency-Based Education movement is the only publication currently available on the subject.

SOME ROOTS OF THE MOVEMENT

Continual and Conscientious Introspection of Education Community

- general concern for maintaining high quality of American educational system
- search for best ways to keep education in step with dynamic and fast-changing society
- search for clearer identity during a time of extreme criticism
- search for best means of improvement and reform

Press for Accountability

- growing dissatisfaction with present approaches--emphasized in landslide of publications
- greater direct involvement of communities who feel that their schools have not met the needs of their children
- student demands for more relevant education
- rapidly rising cost of education and increasing reticence of taxpayers to support increasing costs of education
- increase in public crusades for accountability, e.g., Common Cause, Nader's Raiders

Increased Focusing of Political Action on Fiscal Issues

- central budget agencies in state and local government agencies becoming more and more the focus of political action
- high percentage of key educational administrators spending majority of their time on fiscal matters--and focusing more and more on cost effectiveness

Management Organization Movement

- widespread introduction of systems management into business and industry
- increasing emphasis of federal government on systems management--especially in fiscal matters
- federal, state, and large school system educational leaders being trained in and increasingly confronted with MBO, PPE, and other management approaches
- education forced out of cloistered existence and examined increasingly by same measures as business and industry

Press for Personalization/Individualization of Education

- recognition of differences in learning and teaching styles
- heightened awareness of cultural differences

- desire for more expressive culture
- increase in number and type of students
- technological readiness

Desire of State Education Departments To Develop More Effective Certification Processes and Standards

- most existing systems have not been significantly changed for over 30 years
- greatly increased state share in educational funding and management accompanied by increased emphasis on "streamlining" system
- alleged "surplus" of educational personnel raises general standards of selection

Investment of Federal Funds in CBE Development Efforts

- NCERD Elementary Models
- Teacher Corps projects
- EPDA Section P 2
- Task Force '72
- Texas State Project
- Washington State Project
- AACTE and Multi-States National Committees, Models National Consortium, Southern Consortium
- high priority and visibility in a number of other Office of Education programs

"Readiness" of Educational R and D

- availability of increasingly analytical tools
- \PI
- Mini Courses
- Protocol and Training Materials
- CAI
- ETC.

Increase in Alternative Educational Systems and Resulting Need for Dependable Measures of Comparison

- voucher system
- schools without walls
- open classrooms
- work study programs
- others

SOME DISTINGUISHING CHARACTERISTICS

Specific

- precise objectives stated in behavioral terms
- criteria to be applied in assessing the competencies of students made explicit and public--and negotiable
- students held accountable for meeting these criteria
- decision-making regarding training needs based on successful mastery of objectives
- instructors held accountable for effectiveness of planned program
- achievement held constant and time varied
- emphasis placed upon exit requirements with considerable flexibility in entrance requirements

General

- comprehensive
- systematic
- broad-based decision making
- heavy emphasis on needs assessment
- learner focused
- multiple program options for every set of objectives
- continual evaluation-feedback--adjustment cycle basic part of program
- personalized/modularized
- regenerative
- field-oriented
- assessment-evaluation used as management tools
- use of technology
- use of open space concept
- instructional teams

THE POTENTIAL: THREE PERSPECTIVES

Promising Practices

Many of the ideas that are currently incorporated in performance-based programs are ideas that teacher educators have supported over the years in different forms and under other labels. This fact does not minimize their importance; rather, it makes them all the more important.

Some of the promising leads currently receiving new or renewed emphasis in performance-based programs are

- . *Sharper focus on objectives:* They are determined in advance, made explicit, and used as a basis for evaluating performance.

- . *Individualization of the responsibility for learning:* Responsibility is shifted from the teacher to the individual learner.

- . *More attention to individual differences:* Learners may select different learning experiences and choose alternative routes to achieve the stated objectives.

- . *Individual assessment and feedback:* As early as possible and on a continuing basis, the prospective teacher is provided feedback concerning his performance as he works toward attaining each objective.

- . *More effective integration of theory and practice:* Practice experiences, either in simulated or real-life situations, tend to be related closely to the theory being studied; they are incorporated in the program at the most opportune time.

- . *Evaluation focuses not only on what the learner knows, but also on how he performs in actual teaching situations:* Objectives are typically stated as performance criteria, providing a more effective basis for evaluation.

- . *Change in the role of the teacher:* The teacher is viewed more as an enabler of learning than a dispenser of knowledge.

- . *Satisfaction with program:* Both students and teachers appear to have a high degree of satisfaction with the preparation programs. Students have ample opportunity to provide inputs that will modify programs, and faculty members consider such inputs seriously. Also, students generally seem highly motivated to pursue learning activities that will help them attain stated objectives.³

³Karl Massanari, "AACTE Explores Performance-Based Teacher Education," AACTE Bulletin, 24; March 1971.

"The Meaning and Applications of Performance Criteria in Staff Development"

From:

To:

Preparation for educational service conceived as a college responsibility

Preparation accepted as a mutual responsibility of colleges, school organizations, and professional associations

Program decisions made by a college faculty

Program decisions made by all who are affected

The locus of preparation viewed as being on the college campus

The locus of preparation viewed as being in the schools and their communities

Preparation programs seen as a set of common experiences for all students

Programs seen as a set of common objectives with various and unique experiences

Preparation and staff development viewed as a function of the early part of one's career

Preparation and staff development seen as continuing throughout one's career

Professional career development seen as single-purposed and orderly

Career development seen as multi-purposed and emerging

Competence seen as a set of credentials

Competence seen as the ability to perform

Communication about preparation in a language of courses and credits

Communication in a language of objectives and subsequent performance

Preparation viewed as impersonal and a responsibility of institutions

Preparation viewed as personal and as a responsibility of individuals and colleagues

Preparation experiences seen as orderly, objective, and logical

Preparation experiences seen as capable of being ordered, subjective as well as objective, psychological as well as rational

Feedback on preparation experiences given at the end of the semester in the form of grades

Preparation designed for working in line and staff organizational arrangements

The teacher seen as accountable to his principal

The role of the teacher viewed as passive and subordinate

Voluntary professional associations viewed as being interested only in welfare and fringe benefits

Preparation viewed as screening--ways to exclude people from becoming

Feedback given after each experience in a language of objectives and performance

Preparation designed for working in collegial organizational arrangements

The teacher seen as accountable to and for his students (clients)

The role of the teacher viewed as active and coordinate

Professional associations viewed as being interested in welfare and in the quality of professional practice

Preparation viewed as helping--ways to include people, to help them become⁴

"Performance-Based" Does Not Mean a Teacher Education Program Is Good--
It Just Means It Is Easier to Tell

Q. What are the advantages of a performance-based teacher education program?

A. A performance-based teacher education program offers advantages to participants in the program, to persons conducting the program, and to employers of persons who complete the program. To program participants, it provides clarity of objectives and expectations. If there are certain objectives which every participant must master, these are made clear. If there are certain objectives which are optional, these are also made clear. Thus, the participant is aided in making a judgment as to whether he wishes to participate in the program. To the persons operating the program, the performance-based characteristics help

⁴William H. Drummond, "The Meaning and Applications of Performance Criteria in Staff Development." Phi Delta Kappan, September 1970.

in planning experiences to be included in the program, in making decisions regarding student assignments (i.e., whether a given individual should have an opportunity to spend extra time in certain activities, or should be allowed to bypass certain activities), and in evaluating the effectiveness and efficiency of the program in terms of the time and resources required to achieve mastery of the specified objectives. To employers of program participants, performance-based aspects of teacher education enable them to know what competencies program participants can be expected to possess. Thus, making a program performance-based helps participants determine whether it is "good" (in terms of their interests and aspirations), helps program officials determine whether the program is "good" (in terms of their program criteria), and helps employing officials determine whether the program is "good" in terms of its attention to competencies which they consider important.⁵

⁵K. Fred Daniels, "'Performance-Based' Does Not Mean a Teacher Education Program is Good--It Just Means It Is Easier To Tell" Tallahassee: Florida State Department of Education [n.d.].

HOW MUCH MOVEMENT: AN ERA OF FREE ENTERPRISE

General Degree of Participation (greatest first, etc.): states, higher education, teachers, administrators, community, students.

States^{6,7}

1. Legislative and/or administrative support:
Arizona, California, Connecticut, Florida, Georgia, Michigan, Minnesota, New Jersey, New Mexico, New York, North Carolina, Oregon, Pennsylvania, Texas, Washington, Utah, Vermont.
2. Actively working on new certification standards and approaches:
Alabama, Arkansas, Illinois, Kansas, Louisiana, Maryland, Massachusetts, Nebraska, Oklahoma, Ohio, Rhode Island, South Carolina, South Dakota, Tennessee.

Higher Education

1. American Association of Colleges for Teacher Education gives high priority
--sponsors National Committee on Performance-Based Teacher Education

⁶There is, as would be expected, some variety from state to state regarding their new and/or developing competency-based certification programs, but several characteristics are relatively common to all:

- a) The CBE certification program is established as an alternative to the approved program plan (excepting Texas and New York which have long range requirements for total conversion);
- b) During the early stages of implementation there is a heavy dependency on the successful sharing of materials, models, and resource personnel among states developing CBE programs;
- c) The "first phase" of program development has generally been characterized by numerous local meetings directed at briefing potential constituencies and expanding the base of involvement;
- d) Programs are generally developed by parity groups--that is groups composed of representatives from all major educational constituencies, i.e., state education department, school administrators, teacher associations, institutions of higher education, students, and the community.

⁷For more detailed state descriptions, see Appendix A.

- highlighted in "Beyond the Upheaval," an assessment of the 1970's by its executive director
- full day given to CBTE at 1972 and 1973 annual meetings
- co-sponsor of 1972-73 Teacher Corps/NCIES Regional Seminars on CBTE

2. Questionnaires were sent to 1,200 teacher training institutions by the AACTE Committee on Performance-Based Teacher Education in order to obtain a rough estimation of the degree of involvement of those institutions in competency-based education. Seven hundred eighty-three places responded:⁸

- 125 indicated that they had programs that "for the most part," could be characterized by the CBE definition in Elam's What Is the State of the Art
- 366 indicated that they "are now in the developmental stage and plan to establish a PBTE program." (The data indicate that most of these new programs will be started as parallel programs.)
- of the 783 places responding, only 228 indicated that they were "not involved in PBTE at this time."

3. The liberal arts have generally not been involved in CBE developments, but some examples of programs do exist for almost every academic subject, e.g. Maryland Institute of Art, art; Marymount College, music; Illinois State University, social studies; Columbia Teachers College, language arts; University of Alberta, mathematics; University of Georgia, science; Wayne State University, industrial arts; School Library Manpower Project (see Groups with a National Focus), library-media education; Ohio State Center for Vocational and Technical Education, vocational education.

In active CBE states, subject matter specialists from the state, local education agencies, and cooperating institutions of higher education have also worked on CBE programs for particular subjects.

4. Institutions with high involvement in CBE:⁹

⁸These data are based upon some general institutional responses to some general questions. The AACTE Committee has plans for further and more specific investigation of the degree of higher education participation in PBTE.

⁹These lists of institutions--although probably already outdated--are not intended to give CBE Oscars to particular places but to point up some potential resource centers for those interested in developing CBE programs.

"Total" teacher education program

College of Saint Scholastica, Minnesota
Florida International University
Jarvis Christian College, Texas
Norfolk State College
North Carolina Central University
Prairie View A&M College, Texas
Southwestern Minnesota State College
University of Northern Florida
University of Toledo
Weber State College, Utah

"Alternative" or "parallel" teacher education programs

Appalachia State University, North Carolina
Alabama A&M College
Albany State College, Georgia
Arizona State University
Auburn University
Black Hills State College, South Dakota
Brigham Young University
California State College, Hayward
Carroll College, Montana
Cheyney State College, Pennsylvania
Clark College, Georgia
Columbia University
Doane College, Nebraska
Drake University, Iowa
East Tennessee State University
Eastern Montana College
Florida A&M University
Florida State University
Fordham University
Frostberg State College, Maryland
Governor's State University, Illinois
Grambling College
Illinois State University
Indiana University
Kansas State College
Kansas State Teacher's College
Mankato State College, Minnesota
Marshall University, West Virginia
Marymount College, Kansas
Memphis State University
Michigan State University
Millersville State College, Pennsylvania
New Mexico State University
Oregon College of Education
Pembroke State University, North Carolina
Purdue University, Indiana
Sacramento State College
San Francisco State College

"Alternative" or "parallel" teacher education programs (con't)

Shaw University, North Carolina
South Carolina State College
State University of New York at Albany
State University of New York at Buffalo
State University of New York, College at Cortland
Syracuse University
Texas A&I University at Laredo
Texas Christian University
Texas Southern University
Temple University
Tennessee State University
University of California at Santa Cruz
University of California at San Diego
University of Denver
University of Florida
University of Georgia
University of Houston
University of Illinois
University of Maryland, Baltimore County
University of Massachusetts
University of Michigan
University of Nebraska
University of Nevada
University of North Dakota
University of Oregon
University of the Pacific
University of Pittsburgh
University of Rhode Island
University of South Carolina
University of Texas at Austin
University of Texas at El Paso
University of Utah
University of Vermont
University of Washington
Upsala College
Washington State University
West Texas State University
Western Carolina University
Western Washington State University
Wheeling College
Winston-Salem State University
Xavier University, Ohio

Schools

Teachers:

1. CBTE was focus of American Classroom Teachers Association (NEA) 1971 Annual Thanksgiving Workshop
2. Sessions on CBTE held at all 1971-72 NEA GRIP (Grassroots Involvement Program) Regional Seminars

3. The UFT appointed a study commission on CBTE
4. Position papers on CBTE prepared for "Quest," the 1972 Annual Meeting of the AFT; series by research department on "teacher education and certification by 'performance'."

Administrators:

1. AASA appointed a study commission on CBTE
2. "Sugarbush Conference," sponsored by Vermont and Connecticut State Departments explored implications of CBTE for school administrators, summer 1972
3. One session devoted to CBTE, AASA Annual Meeting, Atlantic City, 1972
4. CBE programs for administrators: Los Angeles State University, St. Johns University (N.Y.), University of Connecticut, University of Utah, University of Vermont.
5. Great Cities School Council Annual Meeting, 1972, General Session on CBE

Some School Districts with Emphasis on CBTE:¹⁰

1. Broward, Dade, and Palm Beach Counties, Florida
2. Houston School District, Texas
3. Portal schools with cooperating institutions in Albany, N.Y.; Athens, Ga.; Atlanta, Ga.; Buffalo, N.Y.; Emporia, Kan.; Houston, Tex.; Oakland, Calif.; Pueblo, Colo.; Schenectady, N.Y.; Tallahassee, Fla.
4. School-based Teacher Corps projects (See State Profile for project locations)
5. Schools participating in Connecticut, Florida, New York, Texas, Washington, and other state pilot projects

¹⁰ It is assumed that many schools and school districts have introduced CBE programs but information on this level is at present very scarce. The National Commission on Performance-Based Education (see page 15) is in the process of making a survey of the nation's largest school districts and the results of the study should be available by summer.

SOME CURRENT RESOURCES

Groups with a National Focus

The National Commission on Performance-Based Education (See *Glossary for further information*)

Educational Testing Service
Princeton, New Jersey 08540

Frederick McDonald, Director
(609) 921-9000 Ex. 2520

Currently focusing on comprehensive analysis of national situation, on major problems of research and development, and on the development of basic materials of instruction and assessment-evaluation. (Supported by a grant from the Rockefeller Brothers Foundation)

The Committee on Performance-Based Teacher Education (See *Glossary for further information*)

American Association of Colleges for Teacher Education
One Dupont Circle, N.W.
Washington, D.C. 20036

Karl Massanari, Director
(202) 293-2450

Currently focusing on determining the "state of the art" of the national competency-based education movement, and on sparking a widespread national dialogue about the progress, prospects, and problems of the competency-based movement. (Supported by a grant from the United States Office of Education)

The Multi-States Consortium on Performance-Based Teacher Education (See *Glossary for further information*)

Division of Teacher Education and Certification
New York State Department of Education
99 Washington Avenue
Albany, New York 12210

Theodore Andrews, Director
(518) 474-6440

Currently focusing on implications of CBTE for state certification and training programs, on interstate sharing of information, materials and personnel, and on helping member states to develop management systems for the development and use of performance-based approaches to teacher education and teacher certification. (Supported by a grant from the United States Office of Education)

The National Consortium of CBE Centers (See Glossary)

Florida State University
Tallahassee, Florida 32306

Norman Dodi, Director
(904) 599-2286

A consortium of the directors of the National Competency-Based Education Centers. These Centers are an outgrowth and further development of CBE concepts and designs first developed as the Comprehensive Elementary Teacher Preparation Models under grants from the National Center for Educational Research. The Consortium currently (a) serves as the coordinating body for the National CBE Centers; (b) serves as a conceptual forum focusing on the refinement and advancement of CBE models; (c) provides CBE leadership at the national level; (d) provides developmental assistance to meet national priority CBE needs
(Supported by a grant from the United States Office of Education)

National Competency-Based Education Centers (Florida State University, University of Houston, University of Georgia, University of Toledo, Syracuse University, Teachers College Columbia University, University of Wisconsin, Michigan State University, Oregon State System of Higher Education--See Glossary for complete addresses)

Nine national centers established to provide developmental assistance and training services for those who are interested in installing competency-based education programs.

The Southern Consortium (See Glossary)

North Carolina Central University
Durham, North Carolina 27707

Norman Johnson, Director
(919) 682-2171 Ex. 466

Currently focusing on development of local models of teacher education and on a dissemination program for "small" colleges interested in installing CBTE programs.
(Supported by a grant from the United States Office of Education)

The "Teacher Center" Leadership Training Institute

University of South Florida
Tampa, Florida 33620

B. Othanel Smith, Director
(813) 974-2100 Ex. 237

Generally concerned with broad question of educational reform and the implications of these questions for staff development and the improvement of schooling, the Institute has as one of its priorities the analysis of major problems of CBTE programs and on the development of materials that could be used in CBTE programs.
(Supported by a grant from the United States Office of Education)

The Committee on National Program Priorities in Teacher Education
Task Force '72 "Outside Track"

Office of the Graduate School
City University of New York
New York, New York 10018

Benjamin Rosner, Director
(212) 239-7430

Currently focusing on a national dialogue and feedback regarding the committee's proposed "five-year national program" for CBTE (outlined in The Power of Competency-Based Teacher Education). (Supported by a grant from the United States Office of Education)

School Library Manpower Project

American Library Association
50 East Huron Street
Chicago, Illinois 60611

Robert N. Case, Director
(312) 944-6780

Administers six experimental program models in competency-based, field-centered approaches in school library-media education. (Supported by a grant from the Knapp Foundation)

National Center for the Improvement of Educational Systems/Teacher Corps

Two United States Office of Education organizations which give high emphasis to CBTE, especially regarding national dialogue, leadership training, program development and installation.

Contact Personnel:

Allen Schmieder
United States Office of Education
FOB #6 Room 4171
400 Maryland Avenue, S.W.
Washington, D.C. 20202
(202) 963-3829

James Steffensen
Teacher Corps
Reporters Building
7th and D Streets, S.W.
Washington, D.C. 20202
(202) 755-7510

Short term groups/conferences--but with considerable national significance

Field Task Forces on Educational Reform (supported by a grant from

the United States Office of Education). Six task forces, representing each of the major constituencies in American education--teacher, administrators, state departments of education, teacher education, the basic subjects, and the community--charged with examining current problems of American education and with making recommendations to the Office of Education regarding some possible alternatives for improving and reforming the system. Reports are to be completed by April 15, 1973.

Summer Institute on Educational Reform (supported by a grant from the United States Office of Education)--same charge as for the Field Task Forces

National Conferences--Illinois, Chicago --- 1973
New York, Fredonia - 1972
Texas, Houston ----- 1971
Florida, Tallahassee-1970

AACTE Committee/Teacher Corps, NCIES
Regional Conferences (1972-1973)

Washington, D.C. ----- September 12
Salt Lake City, Utah ----- November 2-3
St. Louis, Missouri ----- November 27-28
St. Louis, Missouri ----- November 30-December 1
Dallas, Texas ----- January 8-9
Atlanta, Georgia ----- March 12-13
Boston, Massachusetts ----- April 16-17
San Diego, California ----- May 14-15

Significant Publications¹¹

AACTE Committee on PBTE Publication Series:¹²

Published

"Performance-Based Teacher Education: An Annotated Bibliography"
by the Committee

"Performance-Based Teacher Education: What Is the State of the
Art" by Stanley Elam

¹¹The publications in this bibliography were selected for their general nature regarding CBE programming. There are many excellent works that cover specific phases of CBE that are not included. A much greater array of references is provided by the AACTE Committee's "Performance-Based Teacher Education: An Annotated Bibliography," (see above).

¹²Requests regarding this series of publications should be addressed to Karl Massanari, Director, AACTE Performance-Based Teacher Education Project, One Dupont Circle, N.W., Suite 610, Washington, D.C. 20036.

- "A Resume of Performance-Based Teacher Education: What Is the State of the Art?" by Stanley Elam
- "The Individualized, Competency-Based System of Teacher Education at Weber State College" by Caseel Burke
- "Manchester Interview: Competency-Based Teacher Education and Certification" by Theodore Andrews
- "A Critique of Performance-Based Teacher Education" by Harry S. Broudy
- "Competency-Based Teacher Education: A Scenario" by James Cooper and Wilford Weber
- "Changing Teacher Education in a Large Urban University" by Frederick T. Giles and Clifford Foster
- "Performance-Based Teacher Education and the Subject Matter Fields" by Michael Shugrue
- "Performance-Based Teacher Education Programs: A Comparative Description" by Iris Elfenbein
- "A Humanistic Approach to Performance-Based Teacher Education" by Paul Nash

In Process

- "Issues in Governance for Performance-Based Teacher Education" by Michael Kirst
- "Performance-Based Teacher Education Comprehensive Program Design: The Concept of Unity" by Bruce R. Joyce
- "Performance-Based Teacher Education: Some Measurement and Decision Making Considerations" by Jack Merwin
- "The Hopes, Dreams, and Fears of the Organized Teaching Profession for PBTE" by Robert Blaerman and Dave Darland

Allen, Wendell C., and others. "Performance Criteria for Education Personnel Development: A State Approach to Standards," The Journal of Teacher Education, Summer 1969.

Anderson, Daniel A., and others. Competency Based Teacher Education. Berkeley, Calif.: McCutchan Publishing Corp., 1972.

Andrews, Theodore E. New Directions in Certification. Olympia, Wash.: Office of State Superintendent of Public Instruction and State Board of Education.

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- Biddle, Bruce J., and William S. Allena, eds. Contemporary Research on Teacher Effectiveness. New York: Holt, Rinehart and Winston, 1964.
- Burdin, Joel L., and Kalliopee Lanzillotti, eds. A Reader's Guide to the Comprehensive Models for Preparing Elementary Teachers. [An outline of the nine model performance-based education programs. Detailed program outlines also exist for each of the models and can be obtained from the ERIC Clearinghouse on Teacher Education (very limited quantities exist) or directly from models directors.] Washington, D.C.: American Association of Colleges for Teacher Education; ERIC Clearinghouse on Teacher Education, 1969.
- , and Margaret T. Reagan, eds. Performance-Based Certification of School Personnel. [Report of the 1970 National Conference on PBTE, Florida State Department of Education, Tallahassee.] Washington, D.C.: Association of Teacher Educators; ERIC Clearinghouse on Teacher Education, 1971.
- Burkhart, Robert C., ed. The Assessment Revolution: New Viewpoints for Teacher Evaluation (National Symposium on Evaluation in Education). Buffalo: New York State Department of Education; New York State University, 1969.
- Dodl, Norman. The Florida Catalog of Teacher Competencies. Tallahassee: Florida State Department of Education, 1972.
- Gage, N. L., ed. Handbook of Research on Teaching. Chicago: Rand McNally, 1963.
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- Guthrie, James W., and others. Schools and Inequality. Summary of Research on Interaction Between School Input Variables and Pupil Performance. Boston: MIT Press, 1971.
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- , and Robert B. Howsam, eds. Competency Based Teacher Education. [Partially based upon 1971 National Conference on CBTE sponsored by Task Force '72, the Texas State Department of Education, and the University of Houston, at Houston, Texas, Summer 1971.] Palo Alto, Calif.: Science Research Associates, 1972.
- Howsam, Robert B., and Association of Classroom Teachers, NEA. "Performance Based Instruction," Today's Education, 61: 33-40; April 1972.

- Johnson, Charles E. "Some Basic Principles Underlying Performance Based Programs for Higher Education" and "Competency Based Vs. Common Educational Practices." Athens: University of Georgia, 1971.
- Joyce, Bruce R. The Promise of Performance (Competency) Based Teacher Education: An Analytical Review of the Literature and Experience. Washington, D.C.: ERIC Clearinghouse on Teacher Education [In press].
- , and Marsha Weil. Models of Teaching. Englewood Cliffs, N.J.: Prentice-Hall, 1972.
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- Morsh, Joseph, and Eleanor Wilder. Identifying the Effective Instructor: A Review of the Quantitative Studies, 1900-1952. Chanute Air Force Base, Ill.: Air Force Personnel and Training Research Center.
- Peck, Robert F., and James A. Tucker. "Research on Teacher Education," Handbook of Research in Teaching, 2nd ed., Chicago: Rand McNally, 1973.
- Rosenshine, Barak. Interpretation Study of Teacher Behaviors Related to Student Achievement. Philadelphia, Pa.: Temple University, 1970.
- , and Norman Furst. "Research on Teacher Performance Criteria," Research in Teacher Education, edited by B. Othanel Smith. Englewood Cliffs, N.J.: Prentice-Hall, 1971.
- Rosner, Benjamin, ed. The Power of Competency Based Teacher Education. [Final Report of the "Outside Track" of Task Force '72.] Boston: Allyn Bacon, 1972.
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Simon, A., and E. G. Boyer. Mirrors for Behavior: An Anthology of Classroom Observation Instruments. Philadelphia, Pa.: Research for Better Schools, 1970.

Smith, William L. "Performance Based Teacher Education: First Steps First." [Key Note Speech at 1971 Houston National Conference on Performance-Based Teacher Education.] Washington, D.C.: U.S. Office of Education, National Center for the Improvement of Educational Systems.

Vail, Robert B., and others. "Questions and Answers About Local Certificates," mimeographed. Montpelier, Vt.: State Department of Education, Division of Teacher and Continuing Education, 1/ 3.

Newsletters

CBE [Competency-Based Certification], Newsletter of the State Education Department, Division of Teacher Education and Certification, 99 Washington Avenue, Albany, New York 12210

PBTE [Performance-Based Teacher Education], Newsletter of the Multi-States Consortium on Performance-Based Teacher Education and Certification, New York State Department of Education, 99 Washington Avenue, Albany, New York 12210

PPPBTE [Pilot Projects on Performance-Based Teacher Education], Newsletter of the Education Improvement Center, New Haven, Connecticut, Dick Mastain and Carey Curtis editors.

Professions Development Newsletter, especially Volume 4, Number 1, November 1972, A newsletter of Minnesota State Department of Education.

"Other" Materials Centers/Activities¹³

Houston Module Bank, Wilford Weber, Director, College of Education, University of Houston, Houston, Texas.

National Center for the Development of Training Materials in Teacher Education, David Gliessman, Director, College of Education, University of Indiana, Bloomington, Indiana.

¹³ This list could be much longer as it is becoming increasingly obvious to the author that numerous places are developing CBE related materials and that there is a rich "National Storehouse" of materials and processes upon which CBE program developers are able to build.

National Center for the Development of Protocol Materials in
Teacher Education, B. Othanel Smith, Director, College of
Education, University of South Florida, Tampa, Florida.

Florida Center for (competency-based) Teacher Training Materials,
William Spino, Director, College of Education, University of
Miami, Miami, Florida.

Some places with focus on CBE module collection and/or development:
Columbia University, Dade County Florida School System, Far
West Laboratory, Florida State University, University of
Georgia, University of Houston, University of Toledo.

CCBC Notebook: The Competency Based Curriculum--"a national
network for sharing studies, experience, ideas, and sources"
about competency-based preparation programs for school
administrators. Contact Lloyd E. McCleary, 339 Milton Bennion
Hall, University of Utah, Salt Lake City, Utah 84112.

SOME IMPORTANT ISSUES

Any movement as complex as that for competency-based education is sure to inspire a great many relevant--and even some not so relevant--questions and issues regarding developmental problems and priorities. This section is an attempt to summarize those questions and issues that seem to be foremost in the minds of the educators across the nation who are actively involved in the development of CBE programs. It is not to emphasize the problems in competency-based educational programming, but to point up some of the places where people disagree and where a great deal of research and development work is needed.

The first part highlights some of the most controversial issues and, because of their importance, presents some possible answers to pointed questions; the second section presents a more complete list of some of the problems that confront the competency-based education movement.

I. Some of the most controversial issues

Robert Arends, Robert Elmes, and John Masla of the Multi-States Consortium on Performance-Based Teacher Education have compiled answers to six of the most frequently asked questions and criticisms of the competency-based education movement. These issues are highlighted because they are most likely to arise in any discussion of competency-based education.

1. Criticism

The "sum of the parts" does not always equal the whole, and thus, the mere fact that students are able to demonstrate competence in isolation does not guarantee success in the classroom.

Retort

Certainly no one could successfully argue with such a profound and truthful statement. In fact, this is one of the major reasons why we are excited about the new concept. In the conventional program we are not certain what component parts are available to some; thus, it is nearly impossible to even begin to look at the whole. In a competency-based program because the component parts are identified and categorized, we have the unique opportunity of ascertaining whether the sum of the parts does indeed equal the whole.

Remember that one of the goals of competency-based teacher education is the training of teachers who are able to demonstrate their ability to be effective with pupils, and that individual competencies are only the vehicle for reaching that end.

We must caution, however, those who are entering this field that in writing specific objectives for a program, the program goal must always be kept in mind and each individual part must be compatible and contribute to the whole.

2. Criticism

Because the competency-based program has as one of its foundations a systematic approach, it is mechanistic and dehumanizing.

Retort

On the contrary a competency-based program offers the student the opportunity to be very selective in his instruction activities. The emphasis is on the goals and objectives and not the means. We would assume that even a conventional program has some goals or objectives no matter how loosely defined and hidden. A competency-based program liberates the student and individualizes the entire process.

Certainly nothing is more dehumanizing than the traditional instructor-student relationship in most institutions of higher learning where the student is often at the mercy of the capricious and often hidden criteria of the instructor.

3. Criticism

A competency-based program claims individualization, and yet each student is expected to display the same competencies; this claim does not seem consistent.

Retort

A competency program allows the student the opportunity to engage in an individualized instructional program. It does not espouse an individualized outcome; indeed, this is what we are trying to avoid. If the proponents of individualization expect each student "to do his own thing" without regard to goals or objectives, then why have any program at all? For example, we feel that if a student wants to be certified competent in the teaching of reading then he must display the ability to be effective using a variety of approaches. If he is allowed to either avoid any display of competence in this areas, or if he is allowed to select one or two specific methods of treatment, then he is not competent to teach reading to all pupils.

4. Criticism

Trivial behaviors are those most easily operationalized; the really important aspects of teacher education may be overlooked.

Retort

Actually explicit objectives compel teacher educators to attend to the really important aspects of the profession. Because goals and objectives are made public and brought under the scrutiny of peers and students with resulting feedback, there is a much greater chance to eliminate the trivial behaviors.

In addition it assures that broader goals are really being implemented. For example, if a science methods professor claimed that

one of his objectives was "to make my students aware of the advantages of implementing an inquiry approach to sentence," we would not be able to find fault with his basic objective. Yet, if we discovered that he was implementing this goal by delivering lecture after lecture and measuring the outcomes entirely with a true-false test, we would become suspect that he was inconsistent and not really interested in obtaining his lofty objective.

The very fact that we do make behaviors explicit permits the instructor and his colleagues to scrutinize them carefully and thus eliminate those unworthy of our efforts.

5. Criticism

We really know so little about how children learn that it seems ridiculous to base a program on competencies that may not be the appropriate ones.

Retort

Again, if this is true of competency-based programs, it is also true of the conventional one. The advantage again falls to the former because at least we know what has been done to the students in the way of competencies.

Our present programs could be compared to a physician pumping a number of unidentified drugs into a patient, and then not knowing why the patient either recovered or died.

We cannot guarantee at the 100 percent level that the competencies identified in any program are the ones which can facilitate pupil growth. Having identified the specific competencies that the graduates have, we should be able to engage in a much more meaningful follow-up analysis to ascertain the relevance of the competencies.

6. Criticism

The really important areas of teaching are in the affective domain, and these are very difficult to categorize and measure.

Retort

We agree that objectives in the affective domain are difficult to measure; however, we do feel that they can be measured in behavioral terms. Once we have agreed upon the desirable areas of the affective domain we can begin to identify the specific behaviors which are indicative of those areas. For instance, we might agree that we want teachers that are open and are receptive to all types of children. With a goal in mind we can then begin the specific behaviors which would indicate this type of person. Such observable behavior might include, Does the perspective teacher show equal respectivity to both boys and girls? Does the perspective teacher treat majority and minority students equally? Does the perspective teacher only accept the scrubbed, rosy-cheeked, well-clothed, bright, articulate pupil or does he accept the dowdy,

unscrubbed, slow pupil with equal openness? These are but a few of the observable behaviors which could be used to measure competence in the above affective areas.¹⁴

II. A Random List of Some of the More Important Current Problems/Questions/Issues/Needs of Competency-Based Educational (CBE) Programming.¹⁵

The following is a list of the research and development issues and questions that are most commonly raised by people "around the country" who are involved in or are critics of, CBE programming:

1. There is no comprehensive national strategy for the competency-based education movement.
2. National funds for research, development, and installation in CBE are minimal.
3. There is a significant unevenness of involvement of the major educational constituencies, i.e., state departments, colleges and universities, school systems, professional associations, and the community in the development of competency-based educational programs.
4. There is no single complete operating model of either a CBE or a CBE certification program.
5. The CBE theoretical models that do exist are relatively similar to one another and do not represent a broad range of educational approaches and alternatives.
6. All major CBE program components have been developed (and most are in operation), but they are scattered across the nation, and linkage systems are weak or non-existent.
7. There is a lack of common terminology regarding CBE both on the part of those working with CBE and on the part of those who are taking a critical look at the movement from the outside.
8. There is a severe shortage of experienced resource personnel in CBE.
9. There is a severe shortage of CBE program software.

¹⁴These six questions and answers were taken directly from PBTE, the newsletter of the Multi-States Consortium, Vol. 1, No. 3.

¹⁵This list was originally compiled for the National Commission on Performance-Based Education.

10. What are the best mechanisms for "organizing/managing/sorting out/ranking" a googol-plex of competencies?
11. What are the "essential competencies" of teachers, supervisors, administrators? Which will be given highest priority in measuring performance? What evidence do we have that they are essential; that some are more essential than others, etc.?
12. How do you specify the "unspecifiable?"
13. What are the most effective processes for determining key competencies to be demonstrated? How are the competency requirements to be continually adjusted as the world continually changes?
14. How do we really know when competencies have been mastered? What are levels of mastery? What reinforcements are needed? What growths can be expected after first level mastery, etc.?
15. Who should determine key competencies? Will different kinds of groups be needed for different kinds of competencies, e.g., skills, knowledge? Or should the reservoir of competencies be made as large as possible to serve a vast range of knowledge-skill mixes-with complex systems of selection at the ready to develop and retrieve these mixes?
16. How can restraints be minimized in programs that require greater specificity?
17. Are competencies determined within the perspective of today's world or used as levers to better prepare educators for the world of tomorrow?
18. What kinds of systems are needed to make it possible to demonstrate expected behavior in other than real situations? As in the past, students will not always have access to real classroom situations--so protocols, micro-teaching, etc., will need to be used and these are not necessarily performance-based or related at present.
19. Protocol and training materials currently being developed cover only a few of the more significant "competencies." What are most crucial concepts? What is an "adequate" range of protocol and training materials? Can protocol and training materials be developed "locally" by schools?
20. Teachers and others will probably not accept "traditional research justifications" for competency formulation unless they are involved. There is a need to expand the research base and explore implications of new bases.

21. What are the best techniques for measuring relationships between teacher behaviors and student learning? How do you measure those relationships when relating to such profound things as love of life?
22. How to best deal with all those "external factors" that influence the process of learning a competency, e.g., environment, quality of materials, quality of instruction, motivation?
23. Consortium arrangements are central to CBE programming. How can diverse groups most effectively work together? What will major problems be regarding consortiums, e.g., over-lapping decision domains, etc.?
24. "On the job" training is important in CBE programs. What are some new and effective systems for field internships? What are implications for pupils of student teachers? Etc.?
25. One of the goals of CBE is to facilitate more personalized learning programs. To be both more personal and more specific will require very complicated program logistics. The problems could be great, e.g., How will Buggard State University work "thousands of students through thousands of competencies?" What are research implications of individualizing programs at a time when people are abundant and dollars scarce?
26. Module development is essential for "personalizing" CBE programming. What are the best kinds of modules? Who develops them? How "hard" should they be? What kinds of delivery systems are needed to maximize "sharing" of modules across regions and states? What are the problems of "sharing?" (Problems of sharing, transfer, adaption have been critical issues in American education since the "era of co-op research" yet little research time or money has been invested on them.)
27. Regular feedback systems are basic to good CBE programming. What kinds of feedback systems are most effective? How do we train people to develop and use these systems?
28. What are implications of CBE and vice versa, for other major innovations/reforms/improvements of last decade or so, e.g., protocols, mini-courses, programmed instruction, differentiated staffing, field-centered teacher training, use of multi-media?
29. How to best demonstrate that CBE, programming is not "anti-humanistic"-but, in fact, has the potential to be more "humanistic" than traditional educational programming?
30. Does CBE cost more or less than other program alternatives?

31. How would a competency-based certification plan be implemented? Should implementation be brought about statewide, by district, by school building or by classroom?
32. What relationships should exist between competency-based certification and competency-based education programs?
33. What are the implications of competency-based certification for teachers already certified through other certification systems?
34. What will be the frequency of certification, and will the state continue to issue life certificates and professional licensures?
35. What will the effect of competency-based certification be on the inter-state reciprocity of certificates?
36. What would be the legal, statutory, and economic effects of competency-based certification on the department of education and the local schools?
37. What would be the political implications of a competency-based certification system statewide, by district, by community, and by school building unit?¹⁶

¹⁶An outstanding study approach that can be used by CBE developers to intelligently and constructively explore these issues and questions has been developed by Wilford Weber, James Cooper, and Robert Houston at the University of Houston: CBTE, College of Education, University of Houston, Texas.

Appendix A:
THE STATE OF THE STATES

The following chart is not intended to give a complete picture of each of the state's certification and training programs but to present a brief outline of where each is in regards to the introduction or prospective introduction of competency-based education. Some states not showing much activity in CBE have outstanding certification and training programs based upon other conceptual approaches, e.g., approved program.

The information for this survey came from five major sources: (1) Robert Roth, Performance-Based Teacher Certification: A Survey of the States, New Jersey State Department of Education, Trenton, New Jersey, December 1972; (2) the AACTE Committee on Performance-Based Teacher Education, One Dupont Circle, N.W., Suite 610, Washington, D.C.; (3) the National Commission on Performance-Based Education, Princeton, New Jersey; (4) the Multi-States Consortium on Performance-Based Teacher Education, New York State Department of Education, Division of Teacher Education and Certification, 99 Washington Avenue, Albany, New York; and (5) direct communication between the Office of Education and the teacher education and certification departments of individual states. Although considerable help was received from each of these sources, any errors in the reporting of the data are the responsibility of the author. I especially appreciate the help received from the centers listed and encourage readers to send information and materials on CBE activities to these places so that they can continue to be kept well-informed about what is happening across the nation.

Appendix A:
THE STATE OF THE STATES

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State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Alabama	State Board passed resolution requiring the State Department of Education to take initial steps toward performance-based certification.	--gathering information and evaluating concepts --studying 9 model teacher education programs commissioned by USOE --work at Auburn and Alabama A&M Universities on developing model performance-based teacher education programs	
Alaska	Studying concept	--pilot project involving total education cross-section, i.e., state department, universities, school district, community --modeled after State of Washington pilots --Alaska Department of Education (TC)	
Arizona	State Board adopted a policy "to renew or issue all certifications other than the Initial Certificate, on the basis of performance-criteria."	--developed guidelines, 1972 --testing certification and training programs, 1973 --implementation, 1974 --member, Multi-States Consortium --Northern Arizona University (TC)	Performance Certification, What Is It? Arizona Department of Education, Phoenix, 1972. Shofstall, W. P., "Ten Assumptions About Performance Based Re-Certification," Arizona Department of Education, Phoenix, 1972.

*TC: Teacher Corps Project

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Arkansas	Studying concept		"Proposed Modifications to Existing Teacher Education Regulations," Arkansas State Board of Education, Little Rock, 1972.
California	State Legislature enacted Assembly Bill 293 which requires each school district to develop its own evaluation guidelines including standards for assessing student progress and teacher effectiveness. Teachers with permanent certificates will be evaluated every two years; those on probationary certificates every year. Also calls for closer relationships between practice and training.	<p>--large number of institutions of higher education developing alternative or total performance-based teacher education programs (In a recent survey by the State Department, 22 IHE's indicate that they were operating CBE training programs.)</p> <p>--San Francisco State College; University of California, Santa Cruz; University of Southern California; University of California, San Diego; Sacramento State College; California State College; Hayward; University of the Pacific, Teacher Corps Projects</p> <p>--Bay Area Teacher Center</p>	Assembly Bill 293 (The Stull Bill), California State Legislative, Sacramento, 1971.
Colorado	Studying concept	<p>--conducted seminar on CBE</p> <p>--Southern Colorado State College and Adams State College (TC)</p>	

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Connecticut	<p>Task Force on Performance Evaluation and State Certification, has submitted new guidelines for certification to State Board of Education. If approved, "performance evaluation" will become the basis for all certificates (to be done by local committees of teachers, administrators, and community representatives).</p>	<p>--held two statewide conferences</p> <p>--ad hoc commission for certification review led to state Task Force</p> <p>--statewide network of 16 pilot projects</p> <p>--University of Hartford (TC)</p>	<p>--Searle, William, ed., <u>Teacher Education Still An Urgent Matter</u>, Durham, New Hampshire, New England Program in Teacher Education, 1972.</p> <p>--PPPBTE (Pilot Projects on Performance Based Teacher Education), Newsletter of the Education Improvement Center New Haven, Connecticut, Dick Mastain and Carey Curtis editors.</p>
Delaware	<p>State Education Department submitted a proposal for new certification standards to the State Legislature.</p>	<p>--evaluation of recommended changes in field situations</p> <p>--member of five state (OE region III) pilot CBE projects in adult vocational education</p> <p>--University of Delaware, module development and participation in above project.</p>	
District of Columbia	<p>Moving toward CBE but has set no deadlines for implementation.</p>	<p>--District of Columbia Public Schools (TC)</p> <p>--District of Columbia Teacher Center</p>	

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Florida	<p>Developing alternative CBE certification program. Board of Governors of the Florida Education Research and Development Program recommended to the State Education Commission that the following be achieved by the end of 1974: clear identification of competencies expected of training personnel in elementary and secondary schools; compilation of research evidence on relation between teaching and learning; and development of competency-based pre- and in-service training programs.</p>	<p>--65 of 67 school districts have approved master plans for in-service training; several institutions of higher education developing pilot preservice programs, two newly-opened institutions have total CBE programs in professional teacher education programs</p> <p>--developed catalog of competencies and catalogs of training and of protocol materials</p> <p>--statewide program for field-testing protocol and training materials</p> <p>--member Multi-States Consortium</p> <p>--Competency-Based Education Center at Florida State University</p> <p>--Florida A&M University member of Southern (CBE) Consortium</p> <p>--University of Florida, University of South Florida (TC)</p>	<p>--The Florida Program for Improving the Training, Evaluation, and Licensure of Educational Personnel, Florida Department of Education, Tallahassee, 1971.</p> <p>--Performance Based Teacher Certification: Florida Project Program, State Department of Education, January 1972.</p> <p>--The Florida Catalog of Teacher Competencies, Florida Department of Education, 1973.</p> <p>--Florida Catalog of Teacher Training Materials, Florida Department of Education, 1973.</p> <p>--Florida B-2 Teacher Preparation Modules, Florida Department of Education, 1972.</p>

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Georgia	State Board of Education has approved Phase I of a plan calling for the development of a long range plan for achieving competency-based teacher education and certification. Phase II of the plan recommends that the specific competencies to be required be identified and that competency-based training programs be installed in all teacher training institutions.	--Task Force working on Phase I of State Plan --Competency-Based Education Center at the University of Georgia --Atlanta Consortium, Albany State College, University of Georgia (TC)	--Development of a Long Range Plan for Achieving Competency-Based Education and Certification, Georgia Department of Education, 1973. --Series of reaction papers on major developmental issues of CBE, Georgia Department of Education, 1973.
Hawaii	Studying concept		
Idaho	Studying concept	--formal study of concept by State Standards Board --Idaho State University (TC)	
Illinois	Task Force Report recommending "performance expectation and assessment" as the principle basis for certification as well as pre- and in-service teacher education programs, under consideration by state officials and education constituencies.	--statewide conference --recommend development of a select number of centers to perform certification assessment recommending responsibilities --University of Illinois, Chicago (TC), Illinois State University developing model CBE training programs	Bakalis, Michael J., Report of the Task Force on Certification, Springfield, Superintendent of Public Instruction, 1972.

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Indiana	Studying concept	--review of current certification standards --Indiana University, Purdue University at Indianapolis (TC)	
Iowa	Studying concept	--Drake University (TC)	
Kansas	Studying concept	--formal study of concept by State Professional Standards Board --Kansas State University, Kansas State Teachers College (TC)	Von Meter, Eddy and Marty Leftoff, <u>A Competency-Based Training Package for Educational Building Administrators</u> , (In cooperation with Kansas Conclave of Professors of Educational Administrators), 1972.
Kentucky	Studying concept	--performance-based teacher education programs being developed --Louisville Public Schools (TC)	
Louisiana	New state certification standards which greatly enhance the development of competency-based teacher education programs.	--task force set up by state superintendent of education to study competency-based teacher education curricula. --development of model programs at Xavier and St. Mary's Dominican Colleges --East Baton Rouge Parish School Board (with Southern University), Grambling College (TC)	--DeLee, James and Gilbert Browning, <u>A Model for Competency Based Teacher Education</u> (to be published by several journals, copies also can be obtained from authors), State Department of Education, Baton Rouge, 1973.

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Maine	Studying concept	--state teacher education institutions asked to explore how performance criteria might be incorporated into teacher education programs	
Maryland	CBE adopted as one of five major priorities by the State Board of Education.	<p>--State Department sponsored seminar series for state educational leaders</p> <p>--conferences between state department and all individual school districts</p> <p>--cooperative study by Teacher Advisory Council and State Professional Standards Board</p> <p>--training models being developed at Maryland Institute of Art, Frostberg State College and University of Maryland, Baltimore County</p>	<p>--The Informer, for Teacher Education Activities in Maryland (Newsletter of Teacher Education Section of State Education Department), Vol. II, No. 2, Jan.-Feb. 1972.</p> <p>--Competency Based Teacher Education and Certification in Maryland (tentative title), A summary of six staff development seminars on competency-based education, 1972-73.</p>
Massachusetts	Teacher Education, Certification and Placement Bill before legislature which requires that certification be based on demonstrated knowledge and professional performance rather than transcript received.	<p>--University of Massachusetts (TC)</p> <p>--University of Massachusetts developed competency-based teacher education model</p>	Massachusetts Study of 1969, Massachusetts Advisory Council on Education.

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Michigan	State Department of Education developed policy statement recommending performance-based certification which was endorsed by Governor and State Board of Education.	<ul style="list-style-type: none"> --Competency-Based Education Center at Michigan State University --Lansing Public Schools (TC) --Lansing School District and Michigan State University testing feasibility of teacher competency criteria in reading, mathematics, and the social emotional domain --field testing of competency-based accountability model 	<ul style="list-style-type: none"> --<u>Educational Accountability</u>, Michigan Department of Education, Lansing, 1971. --Pfau, Edward, <u>Competent Performance In Teacher Education</u>, Michigan Department of Education, Lansing, 1970.
Minnesota	New certification standards being developed which will place much greater emphasis on performance criteria.	<ul style="list-style-type: none"> --local committees being set up for each public school district --Multi-states Consortium member --competency-based teacher education models developed at Southwest Minnesota State College, College of St. Scholastica and the University of Minnesota at Duluth 	<u>Professions Development Newsletter</u> (especially Vol. 4, Nos 1 & 2) of the Minnesota State Department of Education.
Mississippi	Studying concept	--some CBE component development at several higher education institutions	
Missouri	Studying concept		

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Montana	Interested in developing policies which would accommodate a competency-based certification alternative.	--model training program being developed at Carroll College --Eastern Montana College (TC)	
Nebraska	Current certification standards allow competency-based as alternative program.	--15 approved pilot teacher education programs --workshop scheduled for 1973	
Nevada	Studying concept	--ad hoc committee appointed by State Board to study concept and make recommendations --University of Nevada (TC)	
New Hampshire	Considering some new approaches to teacher preparation.		
New Jersey	Mandate from State Board of Education to develop new state certification standards based upon performance-based education. "Certification in the future will be awarded on the basis of demonstrated competence to teach."	--16 task forces (composed of teachers, aides, college personnel and students) formed for all areas in which present certification are issued to identify competencies for each specific areas as well as those common to all teachers	Cahill, William, Governor of New Jersey, <u>First Annual Message</u> , Newark, 1971.

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
New Jersey (con't)		<ul style="list-style-type: none"> --field testing of outputs from several task forces --state advisory committee established --training model being developed at Glassboro State College --two statewide and 18 regional workshops --New Jersey Urban Education Corps, Upsala College, Camden Educational Development Program (TC) 	
New Mexico	State Department of Education committee to design a competency-based re-certification plan by 1975.	<ul style="list-style-type: none"> --State Superintendent appointed task force to study concept and charged its members with investigating the feasibility of such an approach and with making recommendations to the State Board of Education on possible directions and action --The Task Force is conducting a series of conferences involving state educational leaders to explore the issues --New Mexico State University (TC) 	Interim Report on Competency Based Certification, State Department of Education, Santa Fe, 1973.

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
New York	"To establish a system of certification by which the state can assure the public that professional personnel in the schools possess and maintain demonstrated competence to enable children to learn." Includes plans for a competency-based field centered approach to teacher education.	<ul style="list-style-type: none"> --12 trial projects to develop competency-based, field centered teacher education programs (using parity concept) --Multi-States Consortium member --competency-based education centers at Columbia and Syracuse Universities (also TC) --State University College at Buffalo, State University of New York at Albany 	<ul style="list-style-type: none"> --Education Beyond High School: <u>The Regents Tentative State-wide Plan for the Development of Post-Secondary Education</u>, New York State Department of Education, Albany, 1972. --A New Style of Certification, New York State Department of Education, 1972. --CBE (Competency-Based Certification), Newsletter of the State Education Department, Division of Teacher Education and Certification, 99 Washington Avenue, Albany, N.Y. 12210.
North Carolina	State Board adopted program supporting competency-based certification through development of competency-based teacher education programs.	<ul style="list-style-type: none"> --developing state catalogue of competencies --pilot centers being established --North Carolina Central University member of Southern (CBE) Consortium --Appalachian State University, Winston-Salem University, Western Carolina University (TC) --Appalachian Training Complex 	<ul style="list-style-type: none"> Freeman, J. P., <u>Strategy for Improving Teacher Education in North Carolina</u>, State Department of Education, Raleigh, 1971.

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
North Dakota	Studying concept	--University of North Dakota (TC) --training modules under development	
Ohio	Reviewing current certification procedures regarding the feasibility of developing new training and certification approaches which will help increase the competencies of educational personnel.	--model in-service programs being developed by Cleveland School District --Competency-Based Education Center at Toledo University (also TC)	
Oklahoma	Studying concept	--state conference, 1972 --Professional Standards Board Conference on CBE planned for 1973 --Oklahoma Consortium (TC)	
Oregon	Certification standards encouraging individualized teacher preparation programs based on demonstrated competency within approved program approach. Teacher education schools may waive current course requirements according to individual candidates' previous experience and demonstrated competency.	--Multi-States Consortium member --Competency-Based Education Center at Oregon Commission of Higher Education --University of Oregon (TC)	Process Standards and Guidelines for Competency-Based Educational Personnel Development Programs, (first reading), Oregon Board of Education, Salem, 1972.

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Pennsylvania	New standards developed by Office of State Secretary of Education requiring that education programs become competency-based.	<p>--all teacher education institutions developing model competency-based training programs; several have already initiated new programs</p> <p>--task forces set up to evaluate competency specifications for these programs</p> <p>--colleges and schools and state department cooperating in development of a taxonomy of competencies for each special area of teaching</p> <p>--statewide workshop scheduled for 1973</p> <p>--Cheyney State College, Temple University (TC), University of Pittsburgh developed model CBE training program</p>	<p>--<u>Policies Procedures and Standards for Certification of Professional School Personnel</u>, Office of the Secretary of Education, Harrisburg, 1970.</p> <p>--Series of "Teacher Education Memoranda" (includes definitions, bibliographies, etc. regarding CBE), Bureau of Teacher Education and Certification, Office of the Secretary of Education, Harrisburg, 1972-73.</p>
Rhode Island	Examining ways in which CBE might improve current state systems for training and certifying educational personnel.	<p>--University of Rhode Island, Rhode Island College and Salve Regina College developing model training programs</p> <p>--Sub-committee of Advisory Committee for Certification studying concept and developing plans for performance-based certificates</p> <p>--R.I. State Teacher Center</p>	

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
South Carolina	State department five-year plan for improvement of education recommends that selected institutions develop performance-based evaluation programs.	--South Carolina State College member of Southern (CBE) Consortium --University of South Carolina (TC)	
South Dakota	State Board approved the investigation of a competency-based model of certification as part of a state effort to revise certification standards.	--Certification Advisory Committee established to study standing certification procedures and make recommendations as to how they might be improved --model program being developed Black Hills State College (TC)	
Tennessee	High interest in moving toward performance-based teacher education.	--State Board of Education appointed committee to work on a study of performance-based teacher education --Tennessee State University member of Southern (CBE) Consortium --East Tennessee State University, Memphis State University (TC)	

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Texas	Mandate from State Legislature to be fully operational under a competency-based certification and teacher education program by 1977.	<ul style="list-style-type: none"> --development of statewide network of teacher centers --Texas Educational Renewal Center --Texas Information Services Project --Multi-States Consortium member --Competency Based Education Center at University of Houston (also TC) --Jarvis Christian College member of Southern (CBE) Consortium --University of Texas, Texas Southern University, Texas A&I University at Laredo, University of Texas at El Paso (TC) 	<u>Texas Standards for Teacher Education and Certification</u> , Texas Education Agency, Austin, 1972.
Utah	Moving toward statewide implementation of performance-based teacher education programs. State Board has asked that a training program produce required minimum level of competencies in any person preparing to enter a particular teaching job.	<ul style="list-style-type: none"> --most teacher preparation institutions in state have developed or are developing competency-based programs --State performance-criteria developed for Educational Media --Multi-States Consortium member --Weber State College (TC) 	<u>Recommendations of the Designing Education for the Future Committee</u> , State Board of Education, Salt Lake City, 1971.

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
Vermont	<p>Mandate from State Board of Education to develop alternative in-service certification programs that are competency-based. Competencies are to be determined at the local level by involvement of "all interested parties."</p> <p>State approval of college preservice programs based on commitment to CBTE.</p>	<p>--local school districts interested in participating in new alternative are developing plans to be submitted for state approval</p> <p>--State Department conducts workshops and provides other forms of developmental assistance for school districts installing CBE programs</p> <p>--Multi-States Consortium member</p>	<p>Vail, Robert, Henry Bissex, and Carl English, <u>Questions and Answers About Local Certification</u> (mimeo), Vermont State Department of Education, 1973.</p>
Virginia	Studying concept	<p>--steering committee appointed to study concept</p> <p>--Norfolk State College member of Southern (CBE) Consortium (also TC)</p> <p>--Virginia Consortium (TC)</p>	
Washington	State has established new set of process standards for teacher preparation programs which are to be developed and implemented by a local consortium of agencies and which encourage performance-based programs as an alternative approach to certification.	<p>--local consortia are being formed (about 40 so far) and some have already developed drafts of program plans</p> <p>--Multi-States Consortium member</p> <p>--University of Washington, Washington State College, Washington State University (TC)</p>	<p>1971 Standards for the Preparation and Certification of School Professional Personnel, Department of Public Instruction, Olympia, 1971.</p>

State	Competency-Based Education Goals	Major Developmental Activities	Key Publications
West Virginia	Studying concept	<ul style="list-style-type: none"> --State Advisory Council on Teacher Education and Certification appointed a subcommittee to examine feasibility of performance-based certification --several state-sponsored workshops on subject --model training programs being developed at Marshall University and Wheeling College 	
Wisconsin	Studying concept	<ul style="list-style-type: none"> --PBTE program alternatives developed at several institutions of higher education --Competency-Based Education Center at University of Wisconsin, Madison --University of Wisconsin-Madison, Milwaukee, Stevens Point (TC) 	
Wyoming	Studying concept	<ul style="list-style-type: none"> --formal study of concept by Standards Board 	

Appendix B:
A GLOSSARY OF COMPETENCY BASED EDUCATION

Accountability

The responsibility of educators at all levels to account in measurable terms for the effectiveness of their programs--especially in terms of outcomes. The concept is central to the educational reform movement and has evolved in part from systematic efforts to relate educational procedures to educational results at all levels. Accountability of the United States Office of Education and its various bureaus and national centers is measured in terms of (1) the quality of their response to national priorities and to the school/community site and (2) improvement achieved in the performance of educational personnel and their students. (See also Accountability Model)

Accountability Model

A model of evaluation used by certain programs in the United States Office of Education, which emphasizes the following twelve factors as essential organizing ingredients to assure the possibility of effecting accountability in any given program:

1. *Community Involvement*: participation of community leaders and organizations in educational program activity to facilitate better use of community resources, community understanding of program objectives and procedures, and delegation of program responsibilities to appropriate community clients, services, and support groups.
2. *Technical Assistance*: the provision of expertise and resources in program (project) planning, operation, and evaluation by drawing upon outside resources such as the community, business, and industrial, labor, educational, scientific, artistic, social/welfare, and governmental agencies.
3. *Needs Assessment*: the systematic identification of target-group and situational factors essential to planning a relevant program of action.
4. *Change Strategies*: strategies for producing appropriate systemic change in the educational enterprise in order to improve it.
5. *Project or Program Management Systems*: the adaptation of the systems approach to education and its management through such techniques as "management by objectives," PPBS, PERT, CPM.
6. *Performance Objectives*: the specification of objectives in terms of specific behaviors to be attained by the learners or teachers and the measures and means for assessing the degree of accomplishment of these predetermined standards.

7. *Performance Budgeting*: the allocation of fiscal resources in accordance with program (project) objectives to be realized, rather than by functions to be supported.
8. *Performance Contracting*: attempts to assure the effectiveness of a program through contracts where compensation to the contractor is contingent upon the achievement of specified performance objectives.
9. *Staff Development*: the design and conduct of appropriate training and other activities needed by a staff in order for it to accomplish its mission.
10. *Comprehensive Evaluation*: the continuous assessment and evaluation of program (project) operational and management processes and resultant products.
11. *Program Auditing*: a performance control system based upon external reviews conducted by qualified outside experts designed to verify the results of the evaluation of an educational program (project) and to assess the appropriateness of its evaluation procedures. (See separate listings for further elaboration, Accountability)

Action Steps

Specific goal-oriented activities, usually pre-determined as part of a systematic, comprehensive plan developed to accomplish a particular mission. The scope and timing of each action step is estimated as closely as possible in the comprehensive plan. (See Comprehensive Educational Plan)

Affective Objectives (See Objectives)

Alternative Learning Strategies

Alternative routes or programs for achieving a given set of expected outcomes in contrast to the common practice in American education of presenting single strategies or approaches to the achievement of curriculum objectives. Competency-based education programs place high emphasis on the development and accommodation of a variety of alternative learning strategies within a single unit or curriculum. (See Competency-Based Education, Competency-Based Teacher Education, Performance-Based Teacher Education)

American Association of Colleges for Teacher Education Committee on Performance-Based Teacher Education (Karl Massanari, Associate Director, AACTE, Director, PBTE Project, One Dupont Circle, Suite 610, Washington, D.C.)

Focus on training personnel regarding performance-based teacher education through developing and disseminating publications, sponsoring conferences and workshops, maintaining a PBTE clearinghouse, and disseminating information about PBTE. The Committee has broad and diverse representation from colleges and universities, teacher organizations, state departments of education, student groups, and liaison representatives from other organizations. (See page 73)

Behavioral Modification (See Objectives #2)

Behavioral Objectives (See Objectives)

Cognitive Objectives (See Objectives)

Collaborative Decision Making (See Parity)

Committee on National Program Priorities in Teacher Education (CNPPTTE) Task Force '72 "Outside Track"

A resource team of "experts" from the field of education, organized to work along with, but independently of, Task Force '72 in developing recommendations regarding certain new educational thrusts and their relationship to national educational reform. Consultants were drawn from all levels of the educational spectrum and included persons who have had considerable experience in one or more of the programs under study. The resource team helped insure a much broader and more objective viewpoint in the efforts of Task Force '72. (See also Task Force '72)

Competency-Based Education

1. A system of education which places high emphasis on the specification, learning, and demonstration of those competencies which are of central importance to the effective practicing of a given profession or career.
2. A term used by some to identify the current national movement in "competency-based education and certification." The term has two outstanding advantages:
 - a. it encompasses all major educational constituencies; and

- b. it includes all of the professions, e.g., education, law, medicine.

(See Competency-Based Teacher Education, Performance-Based Teacher Education)

Competency-Based Teacher Education

1. A system of teacher education which has its specific purpose the development of specifically described knowledge, skills, and behaviors that will enable a teacher to meet performance criteria for classroom teaching. Presumably, each competency attained by the preservice teacher is related to student learning and can be assessed by the following criteria of competence:
 - a. knowledge criteria that assess the cognitive understandings of the teacher education student;
 - b. performance criteria that assess specific teaching behaviors; and
 - c. product criteria that assess the teacher's ability to examine and assess the achievement of his or her pupils.
2. Any teacher education program having the following characteristics:
 - a. Competencies (knowledge, skills, behaviors) to be demonstrated by the student which are:
 - 1) derived from explicit conceptions of teacher roles,
 - 2) stated so as to make possible assessment of a student's behavior in relation to specific competencies, and
 - 3) made public in advance.
 - b. Criteria (to be employed in assessing competencies) are:
 - 1) based upon, and in harmony with, specified competencies,
 - 2) explicit in stating expected levels of mastery under specific conditions, and
 - 3) made public in advance.
 - c. Assessment of the student's competency
 - 1) uses his performance as the primary source of evidence;
 - 2) takes into account evidence of the student's knowledge relevant to planning for, analyzing, interpreting, or evaluating situations or behavior; and
 - 3) strives for objectivity.
 - d. The student's rate of progress through the program is determined by demonstrated competency rather than by time or course completed.

- e. The instructional program is intended to facilitate development and evaluation of the student's achievement of specified competencies.

[Stanley Elam, "Performance-Based Teacher Education: What Is the State of the Art?" Washington, D.C.: American Association of Colleges for Teacher Education, 1971.]

Comprehensive Educational Plan

1. A detailed description of a proposed educational program consisting of all its systems, subsystems, and components accompanied by an explanation of its mission, goals, and objectives--a required approach for almost all United States Office of Education programs.
2. A plan which considers the broadest possible range of variables in development of an educational program. (See Needs Assessment, Resource Assessment, Strategy, PERT, Evaluation, MBO, Action Steps)

Confirmatory Mechanisms

Cybernetic feedback instrumentalities which utilize measurable data to provide continuous verification of the relative effectiveness of different components or activities in comprehensive educational systems. These mechanisms provide the continual feedback information necessary to make appropriate adjustments to program components and provide a basis for determining the extent to which the criteria for accountability have been satisfied. (See Feedback Loop, Field Response Mechanisms)

Consortium

An organizational instrumentality, usually informal, which facilitates cooperation, e.g., among colleges and universities, professional organizations, the community, and the schools. The consortium provides a means for engaging the full resources of federal, state, and local educational agencies, and business and community interests in improving education.

Cost benefits

The specific benefits or achievements that result from specific program expenditures. As with "cost effectiveness," in educational planning and development, increasing emphasis is being placed upon comparing a range of program strategies regarding the kinds of incomes that can be reliably estimated to occur as a result of certain specific monetary inputs. (See Cost Effectiveness)

Cost Effectiveness

Analyses designed to measure the extent to which resources allocated to a specific objective under each of several alternatives, actually contribute to accomplishing that objective, so that different ways of gaining the objective may be compared. (See Cost Benefits)

Delivery System (Delivery Mechanisms)

A means, vehicle, or system which facilitates the rapid and effective introduction of validated research products into the mainstream of the American educational system. Any systematic arrangement for disseminating educational products to the client. Teacher centers, workshops, institutes, conferences, and publications can be vehicles for delivery of new ideas, techniques, and materials to the educational consumer. (See Teacher Center)

Differentiated Staffing

The assigning to educational personnel of roles or tasks according to experience and ability, and the rewarding of personnel according to the level of educational activity assigned. Such staffing patterns include various task levels: master teacher, full responsibility teacher, limited responsibility teacher, paraprofessional, aide, volunteer assistant, and student. Differentiated staffing patterns may also include academic teams differentiated by area of expertise. The staff differentiation approach allows specialization in keeping with specific competencies of the staff.

Discrepancy Evaluation (See Evaluation)

Educational Reform

The implementation of changes in educational programs and practices to make them more responsive to the needs of the population served.

Educational Renewal

The improvement of existing educational systems from within. Efforts at federal, state, and local levels to improve existing educational systems through comprehensive reform programs which are planned, developed, implemented, and evaluated by those who will be most affected by the reforms. Although outside resources could and generally would be utilized to supplement local resources, the major focus of educational renewal programs would be upon finding more effective ways of using already existing resources. High priority would be given to the application of educational systems approaches, including comprehensive long-range planning, continuous needs assessment, targeted programming and feedback, and evaluation mechanisms.

Elementary Models (Comprehensive Elementary Teacher Preparation Models)

Designs and specifications for some alternative, systematic, educational programs for elementary school teachers. Ten such models were designed and given initial feasibility tests during 1968 and 1969 with funding from the National Center for Educational Research and Development (NCERD) of the Office of Education. These models focus on institutional realignments, comprehensive planning, training for specific competencies, field-centered training activity, modularized and personalized training programs, a merger of pre- and in-service training, the use of systematic management techniques, and an emphasis on cost effectiveness. Each project includes exemplary competency-based teacher education programs for preparing teachers, with detailed specifications for the teaching competency to be acquired and for each of the numerous related sub-systems and components of the proposed programs. Specifications for these models and feasibility studies are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C.

Enabling Objectives (See Objectives)

Evaluation

The systematic generation of statistical, descriptive, and analytical information on program (project) activities. Evaluation facilitates decision-making in a specific context within a given time frame:

1. *Discrepancy Evaluation*: a method of assessing the gap between explicit promise and systematically assessed performance of a set of activities. The discrepancy between stated goals or expected outcomes and actual results is a measure of the effectiveness of program activities and is a way of pinpointing the areas of both strength and weakness in program design.
2. *Formative Evaluation*: the ongoing assessment of the efficacy of a program during its development and implementation in terms of the degree of accomplishment of pre-stated goals and objectives. The observation, analysis, and interpretation of indicators of progress toward specified program objectives provide the justification and direction for revision of programs while still in their developmental phase. The consequence of formative evaluation is a better product or program in a shorter time.
3. *Process Evaluation*: a procedure of assessing means. Generally, evaluation calls for the measurement of performance against the standard or level specified in the objectives. Process evaluation assesses the effectiveness of the processes undertaken in achieving objectives. Most evaluation of national education programs in recent years has been of this type.

4. *Product Evaluation*: product or impact evaluation assessing the capability of a product to bring about intended changes specified by the goals (objectives) of product use. The increasing demands for greater accountability in education programs have generally called for more of this type of evaluation.
5. *Summative Evaluation*: the assessment of final product and process effectiveness in terms of degree of attainment of prespecified program goals and objectives.

Expected Outcomes

Intended behavioral changes as opposed to unintended changes. When applied to human behavior, expected outcomes must be considered jointly with unexpected outcomes, both of which follow behavioral intervention. That which one hopes to achieve through the implementation of a system may be expressed as goals and objectives. "Goals" tend to be used for larger, generic concerns and "objectives" for more precise delineation of expectations. (See also Output-Oriented Program)

Federal Mission in Education

The fundamental mission of the United States Office of Education and of other federal educational agencies is to administer programs authorized by Congressional legislation. These programs generally have five major purposes:

1. to provide information and statistics about the state of education in the United States;
2. to promote interstate cooperation and sharing of educational experience;
3. to respond to emergency situations related to the national welfare;
4. to support experimentation and demonstration programs that are in the best interest of improving American education but which cannot be afforded by local and state education agencies; and
5. to provide developmental, nationwide assistance in the installation of large-scale service programs growing out of 4 and/or 3 above.

Feedback

A way of giving help; a corrective mechanism for learning how well behavior matches intentions. Some criteria for useful feedback are:

1. It is solicited rather than imposed. Feedback is most useful when the receiver has formulated the kind of question that those observing him can answer.

2. It is descriptive rather than evaluative. By describing one's own reaction, it leaves the individual free to use it or to not use it as he sees fit. By avoiding evaluative language, it reduces the need for the individual to react defensively.
3. It is specific rather than general. To be told that one is "dominating" will probably not be as useful as saying something like, "just now when we are deciding the issue upon _____ you did not listen to what others said, and I felt forced to accept your arguments or face attack from you."
4. It is directed toward behavior which the receiver can do something about. Frustration is only increased when a person is reminded of some shortcoming over which he has no control.
5. It is checked to insure clear communication. One way of doing this is to have the receiver try to rephrase the feedback he has received to see if it corresponds to what the sender has in mind.

(See Confirmatory Mechanisms, Feedback Loop Mechanisms, Field Response Mechanisms)

Feedback Loop Mechanisms

Processes built into programs to provide systematic and regular feedback regarding quality and effectiveness. Such processes not only provide an opportunity for all program participants to have an ongoing input into program development, but also provide the data base that is necessary to make regular adjustments in program strategies and operations. (See Confirmatory Mechanisms, Feedback, Field Response Mechanisms, Formative Evaluation)

Goal

A statement in broad, descriptive terms of the desire and expectations of the desires and expectations of the developer and/or consumers of an educational program. (See also Expected Outcomes, Objectives)

Individualized Instruction

Instructional activities designed to attend to expressed needs of the individual learner, taking into account each learner's accumulated knowledge, skills, and attitudes, his potential and his rate of learning. Programmed materials are often appropriate for individualized instruction. (See Personalized Instruction)

Instructional Modules (See Module)

Integrating Materials

Packaged sets of instructions and suggestions known to be effective in enabling prospective teachers to demonstrate their ability to bring about desired learning outcomes in pupils, develop a particular curriculum segment, design a particular evaluation scheme, or perform other tasks related to learning and teaching. Outcomes of this kind are always situation-specific, e.g., the realization of pupil outcomes always pertains to a specific outcome, or set of outcomes, for a specific child, or set of children, under a specific set of learning conditions; and the development of curriculum always pertains to the statement of goals, objectives, learning experiences, and the like for a specific body of knowledge for specific sets of children under specific sets of learning conditions.

Practice and corrective feedback are critical to the development of such competencies, and a large proportion of the "packaged" integrating materials describe strategies and suggestions relative to the pursuit of such activities. (See also Protocol Materials, Training Materials)

Long Range Planning

The effort to establish over a specified period of time realistic and desirable goals which conform to the criteria of cost-benefit feasibility, sequential PERTing of activities, and the successive steps of sub-goals required to achieve the desired mission. Five years is the most commonly used long-range planning time span.

Management by Objective (MBO)

The directing of planning and implementation operations on the basis of the philosophy, strategies, and outcomes specified explicitly in pre-stated objectives of an organization. An educational program managed by objectives demands, for example, that instruction be carried out on the basis of explicit and coordinated sets of objectives. (See also Objectives, Expected Outcomes)

Materials (See Integrating Materials, Protocol Materials, Software, Training Materials)

Micro-teaching

A relatively new approach to teacher training, a combination of a conceptual system for identifying precisely specified teaching skills with the use of video-tape feed-back to facilitate growth in these teaching skills. Generally organized around small groups of students, micro-teaching gives high emphasis to learner involvement and regular and rapid feed-back from peers and supervisors. The approach is central to the mini-course programs developed at the Far West Regional Educational Laboratory. (See also Mini-Course)

Mini Course

1. A specific set of learning experiences, often self-instructional, designed to teach a single skill or a cluster of related teaching skills in a relatively short period of time. Micro-teaching, self-analysis, and reteaching are typical elements in each unit.
2. A line of instructional products produced at the Far West Laboratory for Educational Research and Development, Berkeley, California.

Module

A package of integrated materials or an identifiable and related set or sequence of learning activities which provides systematic guidance through a particular learning experience or specific program. Competency-based educational programs generally base their instructional content on modules. Modules are of many shapes and styles and may require activities ranging in time from less than an hour to a year or more. Typically, modules include rationale, prerequisites, objectives, strategies, resources, and criteria tests. The use of modules allows a much greater variety of experiences than standard "courses" and provides a far better basis for personalized instruction. (See also Integrating Materials, Mini Course, Protocol Materials, Training Materials)

Multi-States Consortium on Performance Based Teacher Education (Theodore Andrews, Director, Division of Teacher Education and Certification, New York State Department of Education, 99 Washington Avenue, Albany, New York)

A consortium of eight states in the fore of the competency based education movement which is concerned with the implications of CBE for state certification and training programs, with inter-state sharing of information, materials and personnel, and with helping member states to develop management systems for the development and use of performance-based approaches to teacher education and teacher certification.

National Assessment Program

National Assessment of Educational Progress, a program sponsored by U.S. Office of Education and carried out by the Education Commission of the States to measure, at intervals of five years, concerning what young people know, can do, and understand in each of ten broad field of learning: science, writing, citizenship, reading, literature, music, social studies, mathematics, career and occupational development, and art. Surveys to assess performance by 9-year olds, 13-year olds, 17-year olds, and young adults (ages 26-35) are conducted in two fields each year.

National Competency-Based Education Centers

Nine national centers established to provide developmental assistance and training services for those who are interested in installing competency-based education programs.

CBE Center
College of Education
Florida State University
Tallahassee, Florida
904-599-2286

CBE Center
College of Education
University of Houston
Houston, Texas
713-749-3621

CBE Center
College of Education
University of Georgia
Athens, Georgia
404-542-4244

CBE Center
College of Education
University of Toledo
Toledo, Ohio
419-531-5711

CBE Center
College of Education
Syracuse University
Syracuse, New York
315-476-5541

CBE Center
College of Education
Teachers College
Columbia University
Columbia, New York
212-870-4160

CBE Center
College of Education
University of Wisconsin
Madison, Wisconsin
608-262-6152

CBE Center
College of Education
Michigan State University
East Lansing, Michigan
517-355-1903

CBE Center
Oregon State System of Higher
Education
Monmouth, Oregon
503-838-1220

National Commission on Performance-Based Education (Frederick McDonald, Director, Educational Testing Service, Princeton, New Jersey)

A national commission of educational leaders concerned with (1) a continual and comprehensive analysis of the national CBE situation, with (2) the major problems of research and development, and with (3) the development of basic materials of instruction and assessment-evaluation.

National Consortium of Competency-Based Education Centers

A consortium of the directors of the Elementary Education Models developed under a grant from the National Center for Educational Research and the National Center for Competency-Based Education, Norman Dodd, Director, Florida State University, Tallahassee, Florida. The group is currently

focusing on problems of model development, on development of a "National Model of CBE," on providing consultant services for leadership training, and on developmental assistance. (See National CBE Centers)

Needs Assessment

A process--usually a collaborative effort of all the educational constituencies--to examine the gap between specific goals and an existing situation. The evaluative program is essentially one of identifying the felt needs of students, of the community, and of society and assessing the degree to which those needs are being met by the current efforts or accomplishments of the educational system. On the basis of this assessment, the decision-maker is able to select those problems areas which most need attention or modification and to design possible means of satisfying those needs. One example of a Needs Assessment Model is that devised by the Houston Teacher Center:

1. Determine that a needs assessment will be conducted.
2. Identify the assessment leadership, the target area, and the referent groups.
3. Conduct training for the model leadership.
4. Implement the model to assess programmatic needs and establish priorities within those needs.
5. Determine discrepancies between priorities and actual outcomes of present existing efforts.
6. Utilize the data on priorities and discrepancies to identify needed program thrusts.
7. Identify teacher competencies which need strengthening.
8. Relate teacher competency needs with identified program thrusts.
9. Establish teacher training experiences based on the priority needs, program thrusts, and needed teacher competencies.

(See also Accountability Model)

Objectives

Specified outcomes in terms of which programs are carried out and evaluated:

1. *Affective Objectives*: Objectives designed to reinforce or change human attitudes central to behavior in educational activities (values and feelings, appreciations, interests, etc., toward ideas, persons, or events). It is important to note that affective objectives are usually cognitions about effective events.

2. Behavioral Objectives:

- a. Statements of educational goals (general or precise) in terms of the observable behavior of the learner as a measure of achievement. Usually, behavioral objectives are expressed in a three-part format: (1) descriptive statement of the goal, (2) the conditions under which the goal is to be reached, and (3) the level of mastery expected.
 - b. Objectives designed to reinforce or change specific behaviors in order to improve an individual's contribution to the educational activities in which he is involved. The increased use of such objectives has resulted in considerable controversy. Those who support behavioral objectives maintain that educators generally behave in ways that do not strengthen the educational process and need to "change their ways" if any improvement is to take place in the system; others feel that attempts to influence behavior represents inhuman "control" devices and are contrary to the basic nature of the education process. In addition, some hold that not all objectives can be stated in behavioral terms, e.g., the objectives of an instructional seminar.
3. *Cognitive Objectives:* Educational objectives which specify behaviors of the learner relating to perceiving, understanding, processing, or using of knowledge. These objectives together with affective, performance, and product objectives, form the basis for competency-based educational programming.
 4. *Enabling Objectives:* Objectives which describe those knowledges, skills, and attitudes which a learner must attain at some intermediate point if he is to acquire the terminal objective.
 5. *Instructional Objectives:* Those purposes and expected outcomes that guide the learning activities.
 6. *Terminal Behavior Objectives:* Objectives which state what the learner is to be able to do at the end of instruction. They specify the standard levels of performance in behavioral terms.

Output-Oriented Program

A program which is guided and evaluated by what is to be produced, that is, by "expected outcomes." Program design emphasizes product output, and evaluation is based on "exit criteria." Formal eligibility and entrance credentials are given relatively low priority. This kind of program makes possible a great deal of flexibility regarding participant qualifications and program strategies while still keeping the focus on achievement of objectives. (See also Expected Outcomes, Performance-Based Teacher Education)

Parity

Collaborative, mutual, deliberative decision-making, and planning on the part of those giving and receiving services and shared decision-making with equivalent respect to all input. The relationship of parties to a expertise, perspectives, and needs of each of the parties, is a means of making decisions for the common good. In educational programs, a parity relationship typically involves school, community, and university, as well as other special interests, in policy-making and management.

Performance-Based Teacher Education

A teacher education program where the learning outcomes and the indicators acceptable as evidence of the realization of these outcomes, specified and made public. (This type of program is sometimes used as the basis for certification of new teachers.) Learning outcomes may be evidenced at:

1. The knowledge level (the result of interacting with "protocol" materials).
2. The skill level (the result of interacting with "training" materials).
3. The output level (the result of interacting with "integrating" materials).
4. The performance level (the behavior of the teacher).
5. The consequence level (the behavior of pupils).

(See Competency-Based Education, Competency-Based Teacher Education)

Performance Criteria

Standard for measuring evidence of achievement. In answering the question, "What is a professional teacher?", it is important to find acceptable evidence of successful performance by a teacher. Examples of such criteria are those set forth by Richard Turner of Indiana University:

Criterion Level 6 is concerned with the effects of a training program on improvements in teacher knowledges and understanding. Criterion Levels 5 and 4 are concerned with the effects of teacher training on improvement in pedagogic skills under laboratory or simplified training conditions. Criterion Level 3 addresses itself to the effects of training on a teacher's behavior under actual classroom conditions. The concept of pupil change as a criterion of teacher effectiveness is introduced at Criterion Levels 2 and 1. Criterion Level 2 is concerned with changes in pupil behavior that can be effected in a relatively short time

period (one to two weeks) under actual classroom conditions. Criterion Level 1 is concerned with the long-range effects of teacher behavior on changes in pupil achievement and well-being.

There are fundamental differences between Criterion Levels 6 through 3 and Criterion Levels 2 and 1. Criterion Levels 6 through 3 focus directly on the impact of training on teacher behavior. Criterion Levels 2 and 1 are concerned with both the effects of training programs on teacher behavior and with the effects of teacher behavior on pupil performance.

Performance Effectiveness Rate Track (PERT Chart)

A PERT chart which diagrammatically outlines the tasks to be undertaken in a given project or program, sets an expected rate of accomplishment for those tasks, and tracks the sequence of the task activities. The time span for each task is estimated and then the time total for all tasks is computed in order to predict minimum and maximum completion rates.

Performance Standards

The criteria in behavioral terms by which actions are judged to be effective or ineffective in meeting intended outcomes. (See Performance-Based Teacher Education, Performance Criterion)

Personalized Instruction

Instruction which is designed to meet the specific needs of learners. Education is personalized when assessment, objectives, strategies, and evaluation are planned with the learners and tailored to the learner's individual needs, level, rate, values, and choices. Although personalized learning experiences most often occur in individualized or small group situations, they may take place within large groups--as long as the above criteria applies. (See Individualized Instruction)

Process Evaluation (See Evaluation)

Product Evaluation (See Evaluation)

Program Planning and Budgeting System (PBBS)

A structured procedure for determining policy in the allocation of resources for accomplishment of priority programs. It emphasizes long-range planning, analytic evaluative tools, and economic rationality in the setting of goals and objectives and in the determination of programs. (See M30, PERT)

Protocol Materials

Reproductions (visual, auditory, or printed) of behavior that portray concepts in teaching and learning. The immediate purpose of protocol production is to provide the raw material or data for interpretation of classroom behaviors. The ultimate purpose is to facilitate the development of interpretative competencies in teachers. Such competencies include:

1. The ability to demonstrate a functional knowledge of some psychological, philosophical, and sociological concepts that are relevant to the teacher's work.
2. The ability to interpret behavior situations in terms of significant educational concepts.
3. The ability to use interpretations to formulate alternative plans for teaching and other activities such as conferences with parents and interaction with administrators.

(See also Integrating Materials, Training Materials)

Pupil Gain Measures

Used more and more as ultimate criteria of effectiveness of any process or program of teacher education.

Resource Assessment

1. An assessment of the total range of resources available to a particular area for meeting a specific, usually high priority, educational need.
2. The process by which the variables of instructional support are diagnosed, interpreted, and prescribed to meet specific learning objectives.

Scope of Work

The proposed activities that will be undertaken by a given project to enable it to meet its stated objectives.

Software

Instructional systems and processes, curriculums, written or printed educational materials, guides, books, tests, worksheets. They may stand alone as learning packages or units or they may be accompanied by media or other hardware. (See also Hardware)

Southern Consortium (Norman Johnson, Director, North Carolina State College at Durham, Durham, North Carolina)

A consortium of "small" institutions which is concerned with the development of local models of competency based teacher education and on a dissemination program for "small" colleges interested in CBE programs.

Strategy

A deliberate plan of action characterized by rational planning, for achieving an objective or set of objectives.

Summative Evaluation (See Evaluation)

Taxonomy

A hierarchically ordered classification system. Such conceptual schemes are useful for arranging and selecting priorities, for specifying objectives, and for evaluating programs and practices. Familiar to educators is the Taxonomy of Educational Objectives by Bloom, Krathwohl, and others.

Teacher Center

1. A place where teachers share teaching experiences, have access to a wide range of instructional resources, and are trained in specific instructional competencies.
2. One of a large group of centers which represent overall a great variety of purposes. Each individual center, however, has a specific emphasis contributing to the improvement of inservice teachers, e.g., performance-based programs, training of teaching interns, coordination for area educational cooperative, etc.
3. In the proposed Educational Renewal Program, the management mechanism for carrying out the Comprehensive Educational Plan.

Teacher Education Model

An integrated set of program design specifications that establish boundaries or parameters for the structure, function, content, and operation of a teacher education program. A model is not an operational program; it simply provides a framework within which operational programs can be created. Fact, theory, and accumulated wisdom dictate the substance or content of model-based programs and because different people have access to, or accept different sets of facts, theories, and accumulated stores of wisdom, model-based programs vary in their substance. All model-based programs, nevertheless, share the basic parameters established by the model on which they rest. (See also Elementary Model)

Teacher Performance

All the things which a teacher does in the classroom to produce intended changes in learner behavior. The more important aspects of teacher performance include:

1. teacher's ability to control his own behavior;
2. the effect of teaching behavior on pupil attitudes and feeling; and
3. the effect of teaching behavior on what youngsters learn cognitively and how they learn it.

(See Competency-Based Teacher Education, Competency-Based Education)

Terminal Behavior Objectives (See Objectives)

Training Materials

"Packaged" and thereby sharable or distributable learning experiences that have a known degree of reliability in getting a learner to execute a particular skill or set of related skills at a stated performance level. The demonstration context may be simulated (for example, a micro-teaching situation), or it may be a real-life situation. In either case, practice and corrective feedback, two essential elements in skill training, must be provided.

Those aspects of training materials that deal with the practice and corrective feedback will assume the form of instructions and suggestions rather than substantive materials with which to interact. (See also Integrating Materials, Modules, Protocol Materials)

Training Modules (See Module)

ABOUT AACTE

The American Association of Colleges for Teacher Education is an organization of more than 860 colleges and universities joined together in a common interest: more effective ways of preparing educational personnel for our changing society. It is national in scope, institutional in structure, and voluntary. It has served teacher education for 55 years in professional tasks which no single institution, agency, organization, or enterprise can accomplish alone.

AACTE's members are located in every state of the nation and in Puerto Rico, Guam, and the Virgin Islands. Collectively, they prepare more than 90 percent of the teaching force that enters American schools each year.

The Association maintains its headquarters in the National Center for Higher Education, in Washington, D. C.--the nation's capital, which also in recent years has become an educational capital. This location enables AACTE to work closely with many professional organizations and government agencies concerned with teachers and their preparation.

In AACTE headquarters, a stable professional staff is in continuous interaction with other educators and with officials who influence education, both in immediate actions and future thrusts. Educators have come to rely upon the AACTE headquarters office for information, ideas, and other assistance and, in turn, to share their aspirations and needs. Such interaction alerts the staff and officers to current and emerging needs of society and of education and makes AACTE the center for teacher education. The professional staff is regularly out in the field--nationally and internationally--serving educators and keeping abreast of the "real world." The headquarters office staff implements the Association's objectives and programs, keeping them vital and valid.

Through conferences, study committees, commissions, task forces, publications, and projects, AACTE conducts a program relevant to the current needs of those concerned with better preparation programs for educational personnel. Major programmatic thrusts are carried out by commissions on international education, multicultural education, and accreditation standards. Other activities include government relations and a consultative service in teacher education.

A number of activities are carried on collaboratively. These include major fiscal support for and selection of higher education representatives on the National Council for Accreditation of Teacher Education--an activity sanctioned by the National Commission on Accrediting and a joint enterprise of higher education institutions represented by AACTE, organizations of school board members, classroom teachers, state certification officers, and chief state school officers.

The Association headquarters provides several secretariat services which help make teacher education more interdisciplinary and comprehensive:

the Associated Organizations of Teacher Education and the International Council on Education for Teaching. A major interest in teacher education provides a common bond between AACTE and fraternal organizations.

AACTE is deeply concerned with and involved in the major education issues of the day. Combining the considerable resources inherent in the consortium--constituted through a national voluntary association--with strengths of others creates a synergism of exceptional productivity and potentiality. Serving as the nerve center and spokesman for major efforts to improve education personnel, the Association brings to its task credibility, built-in cooperation and communications, contributions in cash and kind, and diverse staff and membership capabilities.

AACTE provides a capability for energetically, imaginatively, and effectively moving the nation forward through better prepared educational personnel. From its administration of the pioneering educational television program, "Continental Classroom," to its involvement of 20,000 practitioners, researchers, and decision makers in developing the current *Recommended Standards for Teacher Education*, to many other activities, AACTE has demonstrated its organizational and consortium qualification and experiences in conceptualizing, studying and experimenting, communicating, and implementing diverse thrusts for carrying out socially and educationally significant activities. With the past as prologue, AACTE is proud of its history and confident of its future among the "movers and doers" seeking continuous renewal of national aspirations and accomplishments through education.

ABOUT ERIC

The Educational Resources Information Center (ERIC) forms a nationwide information system established by the U.S. Office of Education, designed to serve and advance American education. Its basic objective is to provide ideas and information on significant current documents (e.g., research reports, articles, theoretical papers, program descriptions, published and unpublished conference papers, newsletters, and curriculum guides or studies) and to publicize the availability of such documents. Central ERIC is the term given to the function of the U.S. Office of Education, which provides policy, coordination, training funds, and general services to 18 clearinghouses in the information system. Each clearinghouse focuses its activities on a separate subject-matter area; acquires, evaluates, abstracts, and indexes documents; processes many significant documents into the ERIC system; and publicizes available ideas and information to the education community through its own publications, those of Central ERIC, and other educational media.

TEACHER EDUCATION AND ERIC

The ERIC Clearinghouse on Teacher Education, established June 20, 1968, is sponsored by three professional groups--the American Association of Colleges for Teacher Education (fiscal agent); the Association of Teacher Educators, a national affiliate of the National Education Association; and Instruction and Professional Development, National Education Association. It is located at One Dupont Circle, Washington, D.C. 20036.

SCOPE OF CLEARINGHOUSE ACTIVITIES

Users of this guide are encouraged to send to the ERIC Clearinghouse on Teacher Education documents related to its scope, a statement of which follows:

The Clearinghouse is responsible for research reports, curriculum descriptions, theoretical papers, addresses, and other materials relative to the preparation of school personnel (nursery, elementary, secondary, and supporting school personnel); the preparation and development of teacher educators; and the profession of teaching. The scope includes the preparation and continuing development of all instructional personnel, their functions and roles. While the major interest of the Clearinghouse is professional preparation and practice in America, it also is interested in international aspects of the field.

The scope also guides the Clearinghouse's Advisory and Policy Council and staff in decision making relative to the commissioning of monographs, bibliographies, and directories. The scope is a flexible guide in the idea and information needs of those concerned with pre- and in-service preparation of school personnel and the profession of teaching.

ABOUT THE TEXAS TEACHER CENTER PROJECT

The AACTE Committee on Performance-Based Teacher Education serves as the national component of the Texas Teacher Center Project. This Project was initiated in July, 1970, through a grant to the Texas Education Agency from the Bureau of Educational Personnel Development, USOE. The Project was initially funded under the Trainers of Teacher Trainers (TTT) Program and the national component was subcontracted by the Texas Education Agency to AACTE.

One of the original thrusts of the Texas Teacher Center Project was to conceptualize and field test performance-based teacher education programs in pilot situations and contribute to a statewide effort to move teacher certification to a performance base. By the inclusion of the national component in the Project, the Texas Project made it possible for all efforts in the nation related to performance-based teacher education to gain national visibility. More important, it gave to the nation a central forum where continuous study and further clarification of the performance-based movement might take place.

While the Texas Teacher Center Project is of particular interest to AACTE's Performance-Based Teacher Education Committee, the services of the Committee are available, within its resources, to all states, colleges and universities, and groups concerned with the improvement of preparation programs for school personnel.

AACTE PERFORMANCE-BASED TEACHER EDUCATION PROJECT COMMITTEE

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